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(71) Applicant (for all designated States except US):
TRUSTEES OF BOSTON UNIVERSITY [US/US];
One Sherborn Street, Boston, MA 02215 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **EISENBERG,**
Solomon, R. [US/US]; 32 Nonantum Street, Newton,
MA 02458 (US). **MOCANU, Daniel [RO/RO];** Calea
Calarasilor Bl. 20B, Ap. 50, R-6100 Braila (RO).

(74) Agents: **GAGNEBIN, Charles, L., III et al.;** Weingarten,
Schurgin, Gagnebin & Lebovici, LLP, Ten Post Office
Square, Boston, MA 02109 (US).

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ning of each regular issue of the PCT Gazette.

(54) Title: **MAGNETIC STIMULATOR**

(57) Abstract: At least two coils deliver at least two time-varying magnetic fields to a target region within a body. The coils are oriented such that the magnetic fields create intersecting electric fields in the target region. The magnetic fields operate at different frequencies and thus produce a beat frequency signal where the electric fields intersect. The frequencies are chosen so a time-varying electric field, or a current induced by a time-varying magnetic field, alternating at the beat frequency would stimulate excitable tissue located in the target region. Some embodiments utilize a novel coil, which includes a first conductor and at least one second conductor electrically connected to the first conductor at a point. The second conductor extends from the point of connection with the first conductor to a location spaced from the first conductor. At least a portion of the second conductor adjacent the point of connection with the first conductor is non-parallel to the first conductor.

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